

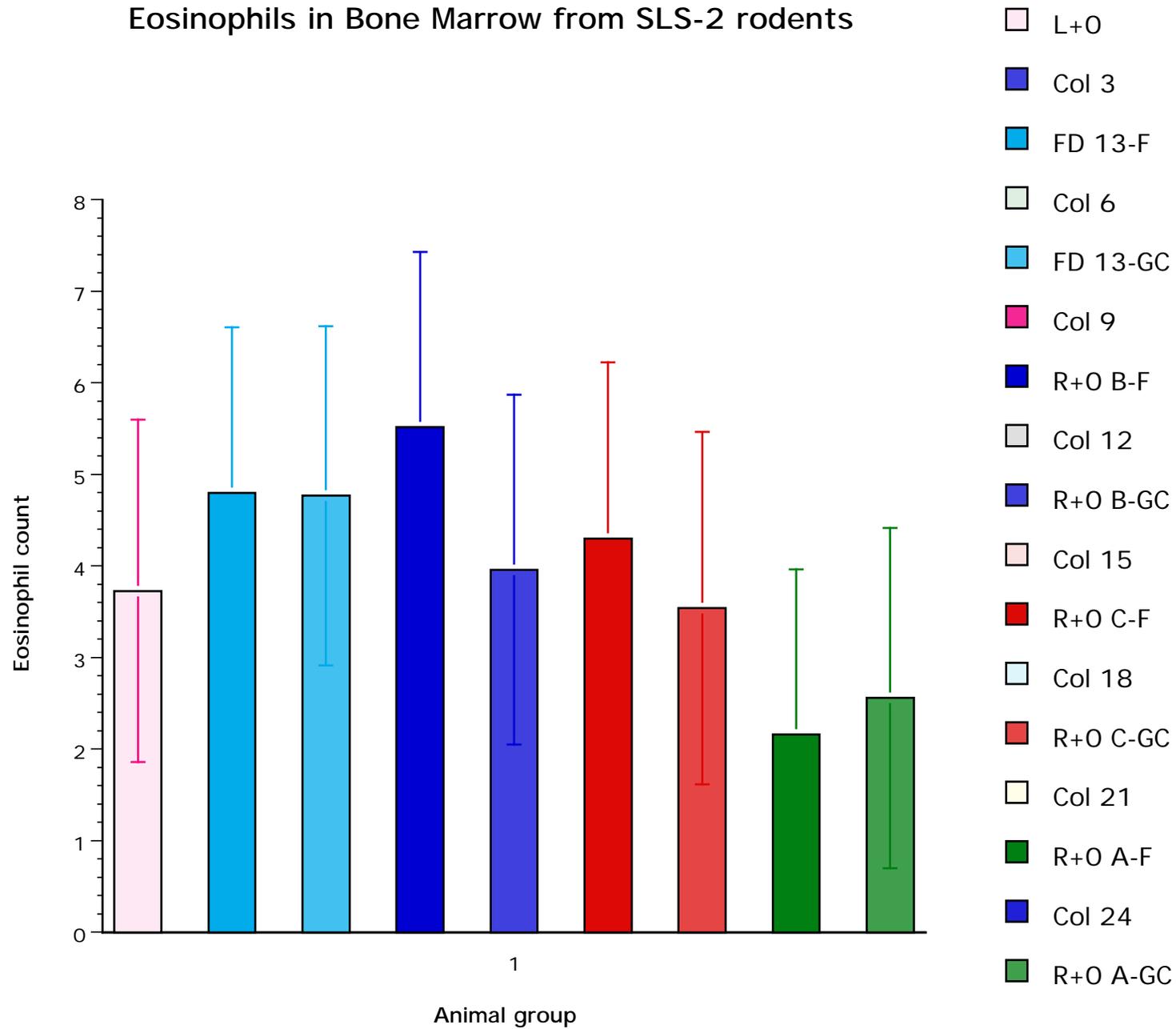
NASA Life Sciences Data Archive														
Investigator name: Albert T. Ichiki														
Mission (Payload): STS-58 (SLS-2)														
Experiment title (ID): Regulation of Erythropoiesis During Spaceflight (178012 2/2)														
File name/Inventory ID: Bone Marrow All Types														
DIFFERENT TYPES OF CELLS FOUND IN BONE MARROW FROM SLS-2 RODENTS														
Note: These data were obtained from bone marrow smear slides.														
Dissection	Animal	Small	Large	Plasma	Reticular	Mature	Immature		Tissue	Mature	Immature			
Day	ID	Lymphocytes	Lymphocytes	Cells	Cells	Myelocytes	Myelocytes	Eosinophils	Basophils	Erythroids	Erythroids	M:E	Mega.	Comments
L+O	1	14.6	6	0	0	20.5	14.6	3.7	0	36.5	4.1	0.57	ADEQU.	
	2	19	7.2	0.2	0.4	16	9.4	2.2	0.4	35.6	9.6	0.28	ADEQU.	
	3	7.4	2.6	0	0	18.6	6.8	4.6	0	53.6	6.4	0.67	ADEQU.	ERYTHR. HYPERPLASIA, Eosinophilia
	4	13.8	5.4	0	0.2	26.6	7.6	6.4	0	32	8	1.5	ADEQU.	Eosinophilia
	5	18.6	7.8	0	0.2	18.2	8.2	2.6	0	40	4.4	1.2	PLENT.	
	6	11.4	5.4	0	0.2	16	7	3.8	0	49.8	6.4	0.78	ADEQU.	
	7	22.4	4.8	0.2	0.2	14.6	11.4	3	0	35.6	7.8	1.3	ADEQU.	
	8	8.6	2.8	0	0.2	23.4	11.2	5.6	0	40.2	8	1.07	PLENT.	
	9	25.4	5.8	0.2	0.6	17.8	11.6	2.6	0	29.4	6.6	1.78	ADEQU.	
	10	10	2.4	0.4	0.6	16.8	10.2	2.8	0	49.4	7.4	0.76	PLENT.	
Mean		15.12	5.02	0.1	0.26	18.85	9.8	3.73	0.04	40.21	6.87			
SEM		1.92	0.6	0.05	0.07	1.17	0.78	0.44	0.04	2.57	0.53			
FD13	R1-F	28.8	5.6	0	0	30.4	10.8	4.4	0	16	4	4	PLENT.	
Flight	R2-F	23.4	7.4	0.2	0.4	29	13.2	4.6	0	17.6	4.2	3.59	ADEQU.	
	R3-F	28.4	7.2	0.4	0.6	24.4	13.6	5	0.4	16.4	3.6	4	ADEQU.	INCR. LYMPHS, MARKEDLY DECR. ERYTH.
	R4-F	26.2	9	0.2	0.4	23.2	16.4	4	0	14	6.6	3.85	ADEQU.	
	R5-F	26.2	8.4	0	0	23	9.6	5.4	0	23.2	4.2	2.65	PLENT.	
	R6-F	23.8	6.6	0	0.4	21.8	12	5.4	0	24.8	5.2	2.33	PLENT.	INCREASED LYMPHS, DECREASED ERYTHR.
Mean		26.13	7.37	0.13	0.3	25.3	12.6	4.8	0.07	18.67	4.63			
SEM		0.92	0.5	0.07	0.1	1.44	0.97	0.23	0.07	1.76	0.45			
Ground control	R1-GC	19.4	6	0.2	0	27.8	11.2	4.6	0.4	26.6	3.8	2.27	PLENT.	
	R2-GC	12	3.8	0.4	0.8	21	13.8	4	0	39.2	5	1.26	ADEQU.	
	R3-GC	46.8	7.8	0	0.2	27	7.8	5.2	0	4.6	0.6	18.2	ADEQU.	
	R4-GC	13.4	3.4	0.6	0.2	17.8	13.4	5.8	0	40.8	4.6	1.2	PLENT.	
	R5-GC	14.8	5	0	0	20.8	13.8	3.8	0	36.6	5	1.4	PLENT.	
	R6-GC	36.4	7.6	0.2	0.2	23.6	13.6	5.2	0	10.4	2.8	6.58	PLENT.	
Mean		23.8	5.6	0.23	0.23	23	12.27	4.77	0.07	26.37	3.63			
SEM		5.86	0.76	0.1	0.12	1.58	0.98	0.32	0.07	1.76	0.45			

BoneMarrow Alltypes-data,stats

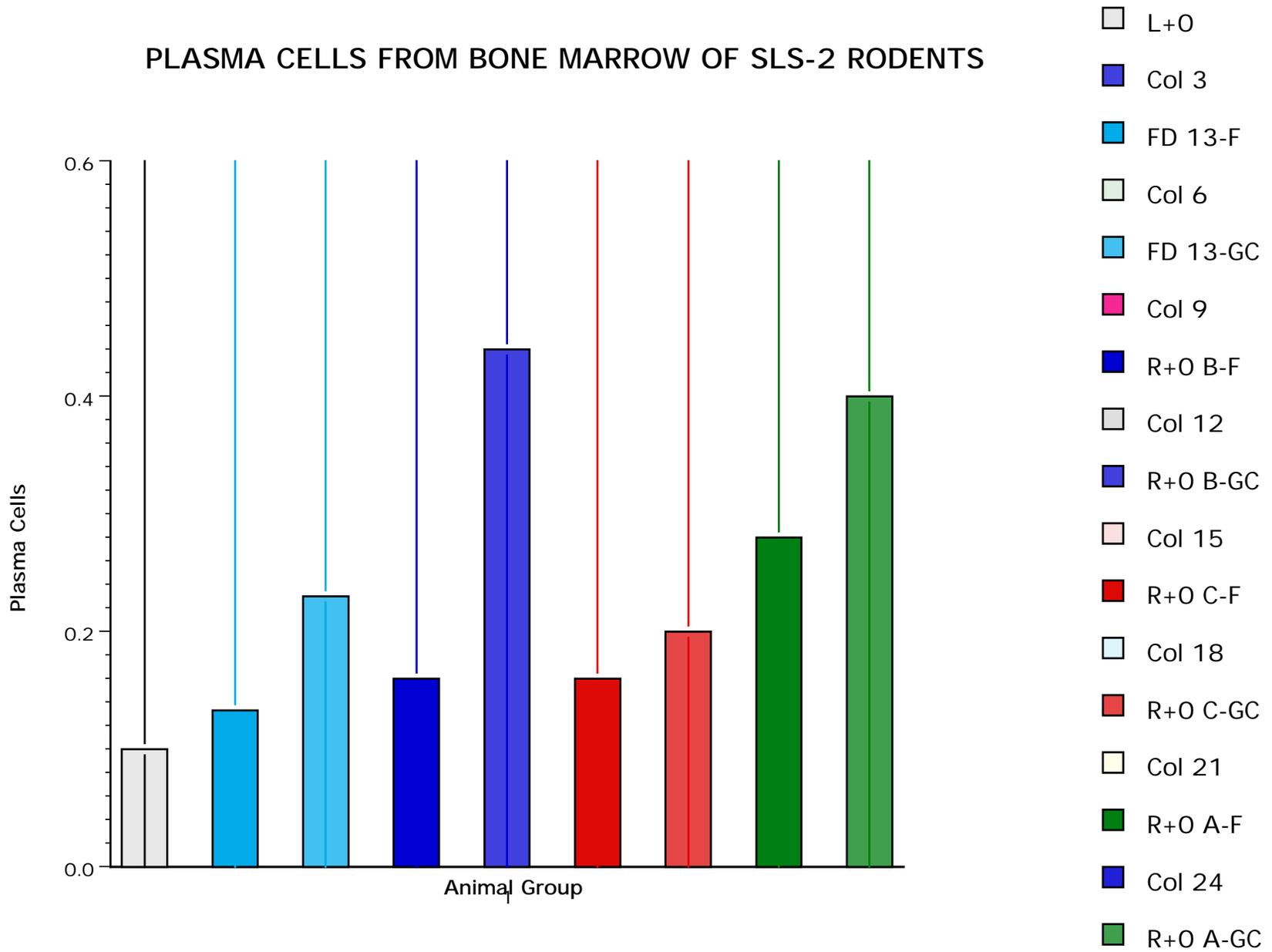
R+O	R1	12.6	3.6	0.4	0	22	7.8	5.2	0	42.4	6	1.06	ADEQU.	
B Flight	R4	10.2	3.6	0	0	28.4	5.6	6.2	0	42.2	3.8	1.17	PLENT.	
	R5	17	6.2	0.2	0	23.2	9	7.4	0	32.2	4.8	1.7	ADEQU.	
	R7	14	3.4	0	0.2	20.6	7.4	4.4	0	44.6	5.4	1	ADEQU.	
	R9	11.2	2.4	0.2	0	25.4	9.2	4.4	0.2	40.2	6.8	1.13	PLENT.	
Mean		13	3.84	0.16	0.04	23.92	7.8	5.52	0.04	40.32	5.36			
SEM		1.19	0.63	0.08	0.04	1.37	0.65	0.58	0.04	2.15	0.51			
B Ground control	C1	15.4	5	0.4	0.2	23.4	10.2	2	0	36	7.4	1.3	ADEQU.	
	C3	21.6	3	0.4	0.6	18.8	8.6	4.8	0	35.6	6.6	1.36	PLENT.	
	C5	9.4	2.8	0.4	0	26.6	6.6	5.2	0	44	5	1.04	ADEQU.	
	C7	16	4.8	0.4	0.4	26.4	8.4	3.6	0	34	6	1.5	ADEQU.	
	C9	18.8	3.8	0.6	0.4	21.2	7.2	4.2	0	39.4	4.4	1.28	ADEQU.	
Mean		16.24	3.88	0.44	0.32	23.28	8.2	3.96	0	37.8	5.88			
SEM		2.04	0.45	0.04	0.1	1.5	0.62	0.56	0	1.78	0.54			
C Flight	R2	14.6	3.2	0	0	21.2	9	6.8	0.4	40.2	4.6	1.23	ADEQU.	
	R3	17	4.3	0.2	0	23.7	11.4	3.9	0.2	35.3	3.9	1.55	ADEQU.	
	R6	25.2	7	0	0	17.8	9.2	5	0	33.2	2.6	1.79	ADEQU.	
	R8	17	4	0.6	0	18.6	11.2	2	0	40.4	6.2	1.05	PLENT.	
	R10	9.2	4.4	0	0	21.6	10	3.8	0	45.8	5.2	0.96	ADEQU.	
Mean		16.6	4.58	0.02	0	20.58	10.16	4.3	0.12	38.98	4.5			
SEM		2.58	0.64	0.12	0	1.07	0.5	0.79	0.08	2.2	0.61			
C Ground control	C2	15	4.8	0.2	0.4	20.4	11	2.6	0.2	38	7.4	1.2	PLENT.	
	C4	20.2	4.2	0.2	0.2	22	8.6	2.4	0.6	35.4	6.2	1.4	PLENT.	
	C6	5.4	5.8	0.2	0.2	20.4	9	2.4	0	54.4	5.8	0.67	PLENT.	ERYTHROID HYPERPLASIA
	C8	17.3	4.9	0.4	0	19.1	7.9	6.5	0.4	38.3	5.3	1.25	PLENT.	
	C10	21	3.8	0	0.2	20.8	4.6	3.8	0	41	4.8	1.18	ADEQU.	
Mean		15.78	4.7	0.2	0.2	20.54	8.22	3.54	0.24	41.42	5.9			
SEM		2.81	0.34	0.06	0.06	0.46	1.04	0.79	0.12	3.36	0.44			
R+9	R11	13.6	6.2	0.2	0	22.2	11.4	1.6	0	39.8	5	1.23	ADEQU.	
A Flight	R12	11.2	4.8	0.4	0.4	23.4	14.2	2.2	0.8	35.2	7.4	1.35	PLENT.	
	R13	16.8	5.8	0	0.4	16.8	12.8	2.4	0.2	38.8	6.4	1.21	ADEQU.	
	R14	16.4	5.6	0.2	0.4	14.2	12.6	2.8	1.4	40.6	5.8	1.16	ADEQU.	
	R15	11.6	4.2	0.6	0.6	20	12	1.8	1.2	42.6	5.4	1.08	ADEQU.	
Mean		13.92	5.32	0.28	0.36	19.32	12.6	2.16	0.72	39.4	6			
SEM		1.17	0.36	0.1	0.1	1.7	0.47	0.21	0.27	1.22	0.42			
A Ground Control	C11	13.2	7	0.8	0.4	27.2	15	3.4	0.4	20.2	12.4	2.06	ADEQU.	INCREASED IMMAT. ERYTH.
	C12	17.4	4.6	0.2	0.2	22	10.4	3	0.6	33.8	7.8	1.4	ADEQU.	
	C13	16.8	5.4	0.6	0.2	20.4	12.8	2.6	0.8	31.2	9.2	1.46	ADEQU.	
	C14	13.2	5.6	0.2	0	21.2	10	2.6	0	39	8.2	1.12	ADEQU.	
	C15	23.4	5.8	0.2	0	21.4	12	1.2	1	29	6	1.86	PLENT.	INCREASED ERYTHR., INCREASED LYMPHS.
Mean		16.8	5.68	0.4	0.16	22.44	12.04	2.56	0.56	30.64	8.72			
SEM		1.87	0.39	0.13	0.08	1.22	0.9	0.37	0.17	3.1	1.06			

Total Myeloid and Erythroid Stats:																				
Note: Total Myeloid is Mature Myeloid and Immature Myeloid. Total Erythroid is Mature Erythroid and Immature Erythroid																				
	<i>Myeloid</i>	<i>Erythroid</i>																		
FD13 Flight																				
Mean	18.95	11.65																		
Standard Error	2.0866	2.286604602																		
Count	12	12																		
FD13 Control																				
Mean	17.633	15																		
Standard Error	1.8459	4.582178918																		
Count	12	12																		
Group A Flight																				
Mean	15.96	22.7																		
Standard Error	1.3955	5.599861109																		
Count	10	10																		
Group A Control																				
Mean	17.24	19.68																		
Standard Error	1.8745	3.965652531																		
Count	10	10																		
Group B Flight																				
Mean	15.86	22.84																		
Standard Error	2.7799	5.918768641																		
Count	10	10																		
Group B Control																				
Mean	15.74	21.84																		
Standard Error	2.6277	5.391911638																		
Count	10	10																		
Group C Flight																				
Mean	15.37	21.74																		
Standard Error	1.8232	5.846655264																		
Count	10	10																		
Group C Control																				
Mean	14.38	23.66																		
Standard Error	2.1225	6.132268023																		
Count	10	10																		

Eosinophils in Bone Marrow from SLS-2 rodents



PLASMA CELLS FROM BONE MARROW OF SLS-2 RODENTS



TISSUE BASOPHILS IN BONE MARROW FROM SLS-2 RODENTS

